

**TECHNICAL REVIEW DOCUMENT**  
**for**  
**RENEWAL of OPERATING PERMIT 97OPEP182**

Fountain Landfill Inc.  
Pueblo County  
Source ID 0410331

Prepared by Matthew S. Burgett  
December 2004

**I. Purpose:**

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewed operating permit proposed for this site. The original Operating Permit was issued September 1, 1999, and expired on September 1, 2004. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted February 2, 2004. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <http://www.cdphe.state.co.us/ap/Titlev.html>.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised construction permit.

**II. Description of Source**

The Fountain Landfill is classified as a municipal solid waste landfill, which falls under the Standard Industrial Classification 4953. This facility is located at 10000 Squirrel Creek Road, Fountain, El Paso County, Colorado. The area in which the plant operates is designated as attainment for all criteria pollutants. There are no affected states within 50 miles of this facility. Florissant Fossil Beds National Monument is a Federal land area within 100 kilometers of the facility. Florissant Fossil Beds National Monument has been designated by the State to

have the same sulfur dioxide increment as a Federal Class I area.

This facility has emissions from the landfill gas generated within the landfill and fugitive particulate emissions generated from various activities at the landfill.

Based on the information provided in the renewal application, no changes have been made to any of the significant emission units. The source did not request any changes to the insignificant activity list.

The summary of emissions that was presented in the Technical Review Document (TRD) for the original permit issuance has been modified to reflect the most recent emission factors and emission estimates (based on historic waste acceptance rates).

**Facility-wide emissions are outlined below:**

Pollutant	Potential-to-Emit (tons/yr)	1997 Actual Emissions (tons/yr)
PM <sub>10</sub>	21.11	1.84
PM	34.56	1.84
CO	89.66	30.95
NO <sub>x</sub>	4.78	5.69
SO <sub>2</sub>	1.56	-
VOC	7.04	1.02
HAPs	3.24	15.63

The potential-to-emit VOC and HAP emissions are calculated from EPA's Landfill Gas Emissions Model (LandGEM). This emission rate is based on the landfill's maximum design capacity of 8.4 million megagrams, and the control equipment required in NSPS WWW. The actual emissions found in the table above are the emissions reported on the most recently submitted APEN.

**Compliance Assurance Monitoring (CAM) Applicability**

The landfill gas collection system is equipped with a flare to control VOC and HAP emissions. The potential to emit of the landfill, without controls, does not exceed major source levels and the flare is not subject to CAM. Additionally, CAM would not apply since 40 CFR Part 60, §60.18 requires continuous compliance (presence of a flame at all times).

**III. Discussion of Modifications Made**

**Source Requested Modifications**

No changes were requested with the renewal application.

### **Other Modifications**

Although the source has requested no modifications, the Division has included changes to make the permit more consistent with recently issued permits, include comments made by EPA on other Operating Permits, as well as correct errors or omissions identified during inspections and/or discrepancies identified during review of this renewal.

These changes are as follows:

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- Monitoring and compliance periods and report and certification due dates are shown as examples. The appropriate monitoring and compliance periods and report and certification due dates will be filled in after permit issuance and will be based on the permit issuance date. Note that the source may request to keep the same monitoring and compliance periods and report and certification due dates as were provided in the original permit. However, it should be noted that with this option, depending on the permit issuance date, the first monitoring period and compliance period may be short (i.e. less than 6 months and less than 1 year).
- Added language specifying that the semi-annual reports and compliance certifications are due in the Division's office and that postmarks cannot be used for purposes of determining the timely receipt of such reports/certifications.

#### **Section I - General Activities and Summary**

- Revised Condition 1.1 to identify Florissant Fossil Beds National Monument as federal land within 100 kilometers of the facility, which has been designated by the State to have the same sulfur dioxide increment as federal Class I designated areas.
- Revised Condition 1.1 to have a more detailed description of the emission sources.
- Conditions 13 and 17 in Condition 1.4 were renumbered to 14 and 18 and Condition 21 in Condition 1.5 was renumbered to 22. The renumbering changes were necessary due to the addition of the Common Provisions requirements in the General Conditions of the permit. Condition 3.g. was added to Condition 1.4.
- Minor language changes were made to Condition 3.1 to more appropriately reflect the status of the source with respect to PSD.

- Based on comments made by EPA on another operating permit, the phrase “Based on the information provided by the applicant” was added to the beginning of Condition 4.1 (112(r)).
- Added a “new” Section 5 for compliance assurance monitoring (CAM).

## Section II - Specific Permit Terms

### Section II.1: Fugitive Particulate Emissions

- PM and PM10 limits were added to the table to be consistent with the Construction Permit. Added a condition requiring compliance with the particulate matter emissions via implementation of the control plan. This is consistent with other recently issued Operating Permits for landfills.
- The tons/yr waste acceptance limit was moved from the landfill gas emissions table to this table.
- Condition 1.1 regarding the submittal of APENs for fugitive dust sources was removed. This condition is unnecessary.
- Condition 1.3 was inserted to require a weekly check of the facility for effectiveness of the control plan. This is consistent with other recently issued Operating Permits for landfills.

### Section II.2: Landfill Gas Emissions

- Added language to require annual compliance with the VOC emissions via EPA’s LandGEM. This is consistent with other recently issued Operating Permits for landfills.
- The waste acceptance limit was moved to the previous table.
- Modified the NSPS WWW, and Regulation No. 6, Part A, Subpart A, General Provisions language to be consistent with other recently issued Operating Permits for landfills (Conditions 2.5 & 2.6).
- Added Condition 2.9 for the state odor requirements to be consistent with other recently issued Operating Permits for landfills.
- Recalculated landfill gas emissions based on historic waste acceptance rates. The emissions in the table have been updated.
- Recalculated the combustion emissions from the flare based on the latest

emission factors from AP-42 2.4. The emissions and emission factors in the table have been updated.

- Added Condition 2.4 to be consistent with the construction permit. This condition lists the operating requirements of the flare to achieve 98% control of VOC. The flare operation conditions and maintenance procedures were submitted by Fountain Landfill during this renewal process.
- Modified condition 2.7 to require a weekly observation of the flare.
- Added Condition 2.8 for the MACT, Subpart AAAA, which now applies to the landfill.
- Revised Condition 2.10 to include a requirement to determine the methane content of the landfill gas on an annual basis. This information will be needed to show compliance with Condition 2.4.

### Section III – Permit Shield

- The citation in the permit shield was corrected.

### Section IV - General Conditions

- Added language from the Common Provisions (new condition 3). With this change the reference to “21.d” in Condition 20 (prompt deviation reporting) will be changed to “22.d”, since the general conditions are renumbered with the addition of the Common Provisions.
- Removed the upset and breakdown provisions from Condition 4 (emergency provisions) since they are included in the Common Provisions.
- The citation in General Condition 16 (open burning) was revised. The open burning requirements are no longer in Reg 1 but are in new Reg 9. In addition, changed the reference in the text from “Reg 1” to “Reg 9”.

### Appendices

- Appendix B and C were modified to make the permit more consistent with recently issued permits.
- The table in Appendix F was cleared.
- Appendix G was added to include information on the flare maintenance and operation.